

Comparisons of Job Characteristics

Focus Occupation: [Biological Technicians \(19-4021\)](#)

Associated Occupation: [Zoologists and Wildlife Biologists \(19-1023\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Biological Technicians (19-4021)

Associated Occupation: Zoologists and Wildlife Biologists (19-1023)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Biology	3.7	21.8	18.9	< Expanded education and/or training may be required
Geography	3.9	11.7	2.5	<< Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 86

Focus Occupation: Biological Technicians (19-4021)

Associated Occupation: Zoologists and Wildlife Biologists (19-1023)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Reading Comprehension	10.7	14.6	14.1	0 Current skill level may be sufficient
Writing	9.2	14.1	10.1	<< Extensive development of skills in this area may be required
Science	4.5	13.6	11.2	< A higher skill level may be required
Systems Analysis	6.5	10.2	8.3	< A higher skill level may be required
Systems Evaluation	6.4	9.4	7.2	< A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 89

Focus Occupation: Biological Technicians (19-4021)
Associated Occupation: Zoologists and Wildlife Biologists (19-1023)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Comprehension	12.5	16.7	12.5	<<	Extensive improvement in abilities may be required
Written Comprehension	11.0	16.0	11.8	<<	Extensive improvement in abilities may be required
Oral Expression	12.4	15.5	11.1	<<	Extensive improvement in abilities may be required
Written Expression	9.8	15.5	11.6	<<	Extensive improvement in abilities may be required
Category Flexibility	9.0	11.0	11.5	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 91

Focus Occupation: Biological Technicians (19-4021)
Associated Occupation: Zoologists and Wildlife Biologists (19-1023)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Analyze biological research, test, or analysis data	70
Analyze scientific research data or investigative findings	27
Collect scientific or technical data	30
Collect statistical data	47
Communicate technical information	4
Conduct analyses or tests of organic compounds	71
Conduct field research or investigative studies	52
Conduct laboratory research or experiments	57
Conduct standardized qualitative laboratory analyses	62
Conduct standardized quantitative laboratory analyses	62
Develop or maintain databases	30
Develop tables depicting data	33
Direct and coordinate activities of workers or staff	3
Examine biological or other material specimens under microscope	73
Explain complex mathematical information	30
Follow infectious materials procedures	52
Follow microbiology procedures	74
Follow safe waste disposal procedures	50
Identify animal species	82
Maintain records, reports, or files	5
Perform statistical analysis	71
Prepare biological specimens for examination	84

Prepare reports	8
Prepare technical reports or related documentation	22
Prepare vaccines, biologicals, or serums	85
Recognize disease or parasites in animals	72
Record test results, test procedures, or inspection data	48
Research human or animal disease	77
Use biological research techniques	68
Use biological testing instruments	73
Use chemical testing or analysis procedures	54
Use computers to enter, access or retrieve data	3
Use hazardous materials information	35
Use knowledge of investigation techniques	16
Use knowledge of vivisection	87
Use laboratory equipment	60
Use mathematical or statistical methods to identify or analyze problems	30
Use microscope	71
Use quantitative research methods	35
Use relational database software	26
Use scientific research methodology	21
Use spreadsheet software	18
Use word processing or desktop publishing software	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 63

Focus Occupation: Biological Technicians (19-4021)

Associated Occupation: Zoologists and Wildlife Biologists (19-1023)

Tools and Technologies	Exclusivity
Autoclave and sterilizer equipment and accessories	12
Business function specific software	1
Chemical evaluation instruments and supplies	10
Computer data input devices	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Data management and query software	1
Electrochemical measuring instruments and accessories	9
General laboratory glassware and plasticware and supplies	13
Indicating and recording instruments	2
Industry specific software	1
Information exchange software	1
Laboratory centrifuges and accessories	13
Laboratory cooling equipment	25

Laboratory enclosures and accessories	17
Laboratory incubating equipment	20
Laboratory ovens and accessories	15
Pipettes and liquid handling equipment and supplies	16
Respiratory protection	6
Spectroscopic equipment	10
Tissue culture and high throughput screening supplies	31
Viewing and observing instruments and accessories	4
Weight measuring instruments	7

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.